

# ***Martensdale-St. Marys Community School***

## ***Math Curriculum***

***Standard 1: Students can understand and apply a variety of math concepts.***

### ***2<sup>nd</sup> Grade:***

<b><i>Benchmark; The student will;</i></b>	<b><i>Grade Level Objectives</i></b>	<b><i>Instructional Strategies</i></b>	<b><i>Assessments</i></b>	<b><i>Instructional Timeline</i></b>
<b><i>A. Understand and apply number properties and operations</i></b>	1.A.2.1: Count, represent, read, compare, order and conserve whole numbers	Count, read, represent, compare, order, & conserve whole #s up to 1000 Write, compare, & order #s to 120 using the words equal to, greater than, less than, greatest, & least Counts by 10s, 100s, forwards, backwards, starting at any number, 1-1000 Represent #s to 1000 using written words, numerals, or models Identify placement among digits & their values in #s up to 1000	Activity pages Chapter test Unit test	
	1.A.2.2: Develop understandings of addition and subtraction and strategies for basic addition facts and related subtraction facts <b>C</b>	Solve & create story problems that match addition or subtraction using objects, pictures, or words Solve simple story problems involving joining, separating, grouping, & comparing by modeling with objects or pictures, counting on & back, and using facts Add & subtract 2-digit #s	Activity pages Chapter test Unit test	
	1.A.2.3: Develop an understanding of whole number relationships, including grouping in tens and ones and applying place value concepts	Group & count objects by 2s, 5s, 10s Find a # that is 10 more or less than a given # Group #s into 10s/1s in more than one way & explain why the total	Activity pages Chapter test Unit test	

		remains the same Explain how you remember addition/subtraction facts to 20 Use mental strategies to add & subtract 2-digit #s		
	1.A.2.4: Understand fractional parts are equal shares or equal portions of a whole unit <b>C</b>	Understand & represent commonly used fractions, such as $\frac{1}{4}$ , $\frac{1}{3}$ , & $\frac{1}{2}$	Activity pages Chapter test Unit test	
	1.A.2.5: Sort, classify, and order objects by size, number, and other properties <b>C</b>	Sort by single and multiple attributes & explain sorting rules VENN Diagram	Activity pages Chapter test Unit test	
	1.A.2.6: Understand equality as meaning “the same as” and use the = symbol appropriately	Recognize in adding & subtracting & determine if true Solve open # sentences Write # sentences using mathematical notation Solve equations where the unknown & equal sign appear in a variety of positions Use # sentences of addition & subtraction, & unknowns to represent & solve given problems	Activity pages Chapter test Unit test	
<b>B. Understand and apply concepts and procedures of algebra</b>	1.B.2.1 Express numbers as equivalent representations to fluently compose and decompose numbers (putting together and taking apart)	Put together or take apart #s to 10, 2-digit & 3-digit #s Solve word problems with joining, separating, part/whole, comparing, & grouping, counting up/back by 1s, 10s, or by using known facts	Activity pages Chapter test Unit test	
<b>C. Understand and apply concepts of geometry</b>	1.C.2.1: Recognize, describe, create and extend repeating and growing patterns such as physical, geometric, and numeric patterns and translate from one representation to another <b>G</b>	Color, rhythmic, shape, # & letter repeating patterns with simple attributes Identify missing pattern element Generalize that patterns can translate from 1 representation to another Recognize, describe, create, & extend repeating & growing patterns Translate patterns between sound, symbols, movements, & objects	Activity pages Chapter test Unit test	

		Identify, create, describe, & extend simple # patterns, involving repeated addition & subtraction, skip counting, & objects Use patterns to solve problems		
	1.C.2.2: Recognize and describe shapes and structures in the physical environment <b>G</b>	Identify, name, sort & describe 2-D & 3-D shapes (circles, triangles, rectangles, squares, cubes, spheres) & real-world examples of the shapes	Activity pages Chapter test Unit test	
	1.C.2.3: Compose and decompose geometric shapes, including plane and solid figures	Combine & take apart 2-D & 3-D figures to develop a foundation of fractional proportions Cover 2-D objects with shapes to develop foundation for area Fill 3-D objects to develop a foundation for volume	Activity pages Chapter test Unit test	
	1.C.2.4: Identify, name, sort, and describe two and three dimensional geometric figures regardless of size or orientation <b>C</b>	Describe characteristics of 2-D & 3-D objects (corners, edges, sides, length of sides, etc...)	Activity pages Chapter test Unit test	
	1.C.2.5: Experience and recognize slides, flips, turns, and symmetry to analyze mathematical situations	Identify shapes that have been rotated (turned), reflected (flipped), translated (slid), & enlarged. Describe the direction of the translation (left, right, up, down)	Activity pages Chapter test Unit test	
	1.C.2.6: Use attributes of geometric figures to solve special problems <b>C</b>	Describe & represent shapes from different perspective Explore different attributes Describe geometric shapes in the environment	Activity pages Chapter test Unit test	
<b>D. Understand and apply concepts of measurement</b>	1.D.2.1: Identify attributes that are measurable, such as length, weight, time, money and capacity and use these attributes to order objects and make direct comparisons <b>C</b>	Using attributes, make direct comparisons Recognize before, after, sooner, later, morning, afternoon, evening Order & compare lengths Recognize that objects used to measure an attribute must have that attribute & must be consistent in size	Activity pages Chapter test Unit test	

		Determines relationship between the size of the unit & the # of units needed to make a measurement		
	1.D.2.2: Estimate and measure length using standard (customary and metric) and nonstandard units with comprehension <b>C</b>	<p>Understand that identical units yield accurate measurements</p> <p>Use non-standard units to measure length, compare object capacities or weights</p> <p>Associate the time of day with everyday events</p> <p>Name standard units of time (day, week, month)</p> <p>Use analog &amp; digital clocks to tell time to the hour &amp; half-hour</p> <p>Estimate &amp; measure length using metric &amp; customary units</p> <p>Select appropriate measurement tools &amp; units to solve problems</p> <p>Use analog &amp; digital clock to tell time to nearest 5 minute-interval</p> <p>Describe relationship between minutes, hours, days, weeks, months, &amp; years</p>	<p>Activity pages</p> <p>Chapter test</p> <p>Unit test</p>	
<b>E. Understand and apply concepts in probability and statistics</b>	1.E.2.1: Use information displayed on graphs to answer questions and make predictions, inferences and generalizations such as likely and unlikely events <b>MCGF</b>	<p>Answer simple questions relating to information displayed on a graph, table, or list</p> <p>Ask &amp; answer questions about data collected</p> <p>Contrast different data sets displayed on the same type of graph to draw conclusions or make generalizations</p> <p>Use data information to make observations &amp; inferences, draw conclusions, or make predictions</p>	<p>Activity pages</p> <p>Chapter test</p> <p>Unit test</p>	

**Martensdale-St. Marys Community School  
Math Curriculum**

**Standard 2: Students can understand and apply methods of estimation.**

**2<sup>nd</sup> Grade:**

<b>Benchmark: The students will:</b>	<b>Grade Level Objectives</b>	<b>Instructional Strategies</b>	<b>Assessments</b>	<b>Instructional Timeline</b>
<b>A. Understand and apply concepts and procedures of standard rounding, and number sense</b>	2.A.2.1: Estimate the answer to an addition or subtraction problem before computing, and determine whether the computed answer makes sense <b>T</b>	Estimate an answer prior to computing Determine whether the computed answer to addition or subtraction problems is reasonable	Activity pages Chapter test Unit test	
	2.A.2.2: Estimate, measure, and compute measurable attributes while solving problems <b>T</b>	Select appropriate measuring tools & units (standard & non-standard) to solve problems	Activity pages Chapter test Unit test	

**Martensdale-St. Marys Community School  
Math Curriculum**

**Standard 3: Students can solve a variety of math problems.**

**2<sup>nd</sup> Grade:**

<b>Benchmark: The student will:</b>	<b>Grade Level Objectives</b>	<b>Instructional Strategies</b>	<b>Assessments</b>	<b>Instructional Timeline</b>
<b>A. Solve problems</b>	3.A.2.1: Develop fluency and quick recall of addition facts and related subtraction facts and fluency with multi digit addition and subtraction	Show relationship between addition and subtraction by models, diagrams, or acting out Explain & use strategies for fact families equal to at least 10 Demonstrate quick recall of basic addition & subtraction facts to 20 Solve word problems by joining, separating, part/whole, comparing, & grouping by modeling, counting up/back by 1s/10s, or recalling facts	Activity pages Chapter test Unit test	
<b>B. Understand and apply problem-solving approaches and procedures</b>	3.B.2.1: Demonstrate the use of the commutative and associative properties and mathematical reasoning to solve for the unknown quantity in addition and subtraction problems; justify the solution	With objects, solve simple addition & subtraction problems Develop concepts of addition & subtraction using # lines, hundreds charts, objects, pictures, & mathematical notation Solve a variety of addition & subtraction problems using 2 or more 1-digit #s	Activity pages Chapter test Unit test	

**Martensdale-St. Marys Community School  
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**Standard 4: Students can interpret data presented in a variety of ways.**

**2<sup>nd</sup> Grade:**

<b>Benchmark: The student will:</b>	<b>Grade Level Objectives</b>	<b>Instructional Strategies</b>	<b>Assessments</b>	<b>Instructional Timeline</b>
<b>A. Use tables and graphs to locate and read information</b>	4.A.2.1: Collect, sort, organize, and represent data to ask and answer questions <b>T</b>	Organize data in lists, table, or simple graphs Represent data using bar graphs, pictures graphs, or line plots Collect data by interviews, surveys, or observations	Activity pages Chapter test Unit test	
<b>B. Interpret data from a variety of sources</b>	4.B.2.1: Compare different representations of the same data using types of graphs, tables, line graphs, and picture graphs <b>T</b>	Represent data using tallies, tables, picture or bar graphs Compare a single data set using 2 types of graphs	Activity pages Chapter test Unit test	
	4.B.2.2: Describe and specify space and location with simple relationships and coordinate systems <b>G</b>	Locate points on maps & simple coordinate grids with letters & #s Represent points & simple figures on maps using simple coordinate grids with letters & #s	Activity pages Chapter test Unit test	